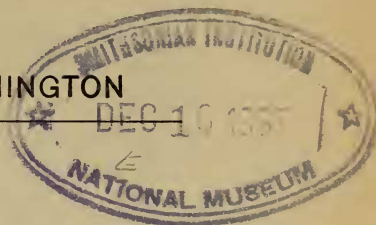


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTONTWO NEW POCKET GOPHERS OF THE *THOMOMYS*
BOTTAE GROUP.

BY E. A. GOLDMAN.

Further studies of pocket gophers of the *Thomomys bottae* group have resulted in the discrimination of two new geographic races. One of these is from Arizona and the other from Utah.

***Thomomys bottae virgineus*, subsp. nov.**

VIRGIN VALLEY POCKET GOPHER.

Type.—From Beaverdam Creek, near confluence with Virgin River, at Littlefield, northwestern Arizona (altitude 1,500 feet). No. 262016, ♂ adult, skin and skull, U. S. National Museum (Biological Survey collection), collected by Luther C. Goldman, October 16, 1936. Original number 67.

Distribution.—Virgin River Valley in northwestern Arizona and probably southeastern Nevada.

General characters.—A rather light-colored subspecies of medium size. Most closely resembling *Thomomys bottae centralis* of eastern Nevada, but somewhat deeper cinnamon buff; skull narrower, more elongated. Similar to *Thomomys bottae planirostris* of Zion National Park, Utah, but much smaller, color cinnamon buff instead of ochraceous tawny, skull less massive. Differing from *Thomomys bottae trumbullensis*, of the Mount Trumbull region, Arizona, in much paler coloration and cranial details.

Color.—*Type* (acquiring fresh pelage): Upper parts near "cinnamon-buff" (Ridgway, 1912) finely and rather inconspicuously mixed with black on head and over back, paling to "pinkish buff" on cheeks, shoulders, forearms, flanks, and thighs; under parts overlaid with "pale pinkish buff"; muzzle blackish; feet white; tail light buffy above, whitish below, becoming purer white all around near tip.

Skull.—Very similar to that of *centralis*, but relatively narrower, more elongated; zygomatica less widely spreading, more distinctly bowed inward near middle of jugals; premaxillae extending farther posteriorly beyond nasals; molariform teeth heavier. Compared with *planirostris*: Much smaller, less massive; naso-frontal region convex, instead of flattened or

depressed along the median line; premaxillae relatively narrower; dentition lighter. Compared with *trumbullensis*: Size about the same; zygomata less widely spreading, the sides more strongly bowed inward near middle of jugals; palato-pterygoids usually narrower; molariform teeth larger.

Measurements.—*Type*: Total length, 231 mm.; tail vertebrae, 68; hind foot, 28.5. Average of three adult male topotypes: 232 (232–232); 74 (72–75); 31.5 (31–31.5). Two adult female topotypes, respectively: 207, 210; 62, 58; 28, 29.5. *Skull* (type and an adult female topotype): Occipito-nasal length, 38.6, 35; zygomatic breadth, 23.8, 21; width across squamosals (over mastoids), 19.6, 19.3; interorbital constriction, 6.2, 6.6; length of nasals, 13.4, 11.6; maxillary toothrow (alveoli), 7.9, 8.1.

Remarks.—*T. b. virgineus* probably has an extensive range along the lower part of the Virgin River Valley. Close resemblance to *T. b. planirostris*, which inhabits the upper reaches of the Virgin River Valley, might be expected, but the two contrast rather strongly and their ranges may be separated near the point where the river breaks across the fault line marked by the Beaverdam Mountains on one side and the Grand Wash Cliffs on the other.

Specimens examined.—Ten, all from the type locality.

***Thomomys bottae birdseyei*, subsp. nov.**

PINE VALLEY MOUNTAINS POCKET GOPHER.

Type.—From Pine Valley Mountains, five miles east of Pine Valley, Washington County, Utah (altitude 8,300 feet). No. 161654, ♂ adult, skin and skull, U. S. National Museum (Biological Survey collection), collected by Clarence Birdseye, October 10, 1909. Original number 861.

Distribution.—High mountains and adjacent plateau region in southwestern Utah.

General characters.—A dark-colored high mountain subspecies. Similar in general size and color to *Thomomys bottae trumbullensis* of the Mount Trumbull region, Arizona, but cranial features, especially the median depression of the frontals, distinctive. Allied to *Thomomys bottae planirostris* of Zion National Park, Utah, but much smaller and darker; skull less massive. Also similar to *Thomomys bottae absonus* of Houserock Valley, Arizona, but color darker and cranial details different.

Color.—*Type*: Upper parts near "cinnamon" (Ridgway, 1912), moderately mixed with black over top of head and back, becoming lighter and near "cinnamon-buff" on forearms, flanks, and thighs; under parts overlaid with "pinkish buff"; muzzle blackish; feet white; tail light brownish above, near base, becoming whitish below and whitish all around toward tip. General color varying in some specimens to light tawny above and below.

Skull.—Similar in general to that of *trumbullensis*, but more depressed along median line of frontals and posterior ends of nasals, tending toward concavity in transverse section at naso-frontal suture; zygomata more widely spreading anteriorly; auditory bullae less inflated, less bulging below level of basioccipital; dentition about the same. Much smaller,

less massive than in *planirostris*, but similar in the median depression of frontals and nasals; maxillary arm of zygoma much more slender; auditory bullae flatter, less bulging below level of basioccipital; dentition relatively lighter. Compared with that of *absonus* the nasals and frontals are more depressed along the median line, the zygomata are more widely spreading, and the dentition is lighter.

Measurements.—*Type*: Total length, 232 mm.; tail vertebrae, 76; hind foot, 30. An adult female topotype: 223, 75; 30.5. *Skull* (type and an adult female topotype): Greatest length, 40.7, 36.8; occipitonasal length, 40.3, 36.4; zygomatic breadth, 25.9, 22.4; width across squamosals (over mastoids), 21, 18.3; interorbital constriction, 6.4, 6.3; length of nasals, 13.2, 11.6; maxillary toothrow (alveoli), 7.9, 7.3.

Remarks.—*T. b. birdseyei* closely approaches *trumbullensis* in external appearance, but in the tendency toward depression or concavity of the cranium along the median line anteriorly alliance to the otherwise differing form *planirostris* is suggested. In the high mountains of southwestern Utah it invades the type of habitat usually occupied by *Thomomys fossor* in the general region.

Specimens examined.—Total number, 13, all from Utah, as follows: Hebron, 1; Mountain Meadows (Hamblin Ranch), 2; Pine Valley, 4; Pine Valley Mountains, 6.